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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/014,421	12/14/2001	John E. Owens	5686.0046-00	3765

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EXAMINER

CHRISTMAN, KATHLEEN M

ART UNIT PAPER NUMBER

3713

DATE MAILED: 02/02/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/014,421

Applicant(s)

OWENS ET AL.

Examiner

Kathleen M Christman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspond nc address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/14/2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. Applicant is requested to provide a descriptive legend for each of the structural elements in the drawings currently represented in the form of a hollow rectangle, for example those denoted by symbols 10-36 in Figure 4 38-52 (even only) in Figure 5. Further it appears that Figures 1, 2 and 8, depict multiple views of the invention. Each of these sub-figures should be labeled individually.

Priority

2. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 119(e) as follows:

The later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (the parent or original nonprovisional application or provisional application); the disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994).

Claim Rejections - 35 USC § 112

3. Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention/. Claim 19 recites the limitation "the monitored respiration pattern". There is insufficient antecedent basis for this limitation in the claim. It appears that this claim should depend from claim 18 and not claim 17, and as such has been treated as such for purposes comparison with the prior art.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-11 and 13-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Lampotang et al (US 5584701). Lampotang teaches a simulated mechanical lung for system and a method of its use including: a reservoir having an outlet (the bellows); an actuator disposed in the reservoir for moving fluid in and out of the reservoir (the mass flow controller, col. 5: 34); and a control unit electrically coupled to the actuator for controlling the actuator to simulate the respiration pattern of a human (the computer and computing means, see Figures 5 and 6), as in claim 1. The reservoir having a pair of cylinders connected in parallel by a conduit (claim 2) is taught in at least, col. 16: 35-46, in the teaching of two bellows being used simulate a pair of lungs. The actuator including a piston (claim 3) is taught in col. 5: 42-44. A valve in fluid communication with the outlet of the reservoir, the valve being configured to control a flow rate of the fluid to and from the reservoir (claim 4) is taught in col. 17: 58-65. The control unit including a waveform generation device for generating a waveform defining the respiration pattern (claims 5 and 13), the control unit controlling the actuator based on the waveform to simulate the respiration pattern (claims 6 and 13) and the waveform generation device generating the waveform based on human respiratory characteristics (claims 7 and 14) are taught in col. 13: 8-15. The human respiratory characteristics being pre-stored in the control unit (claim 8 and 16) or that the characteristics may be inputted (claims 9 and 16) and the ability to modify the characteristics (claim 17) is taught in col. 14: 56-67, in that the basic patterns are stored and a user selects (or inputs) the desired options for the simulation. A pressure transducer in fluid communication with the reservoir and electrically coupled to the control unit (claim 10) and the

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control unit monitoring respiration pattern through the pressure transducer (claim 11 and 18) are taught in col. 17: 48-51.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 12 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lampotang et al (US 5584701) in view of East, IV et al (US 5975748). Lampotang teaches all aspects of the invention as shown above, but fails to teach that the control unit including a data acquisition module to store the monitored respiration pattern (claim 12) or that the data is stored (method step of claim 19). East clearly shows this function in col. 4: 10-16. It would have been obvious to modify the system of Lampotang et al with the data acquisition abilities of East so as to allow a user to analysis the results of a simulation after the simulation has been completed, as taught by East.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- a. Orden (US 4167070) teaches a dual chamber lung simulator
 - b. Ingenito et al (US 4828501) teaches an interactive lung simulator where a variable may be altered in the course of a simulation (note, the computer program index has been omitted)
 - c. Gordon et al (US 3662076) teaches a training manikin including simulated lung function

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kathleen M Christman whose telephone number is (703) 308-6374. The examiner can normally be reached on M-F 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Teresa Walberg can be reached on (703) 308-1327. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.



Kathleen M. Christman



Teresa Walberg
Supervisory Patent Examiner
Group 3700